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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR SOLLICH

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08/942,782

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10/02/97

EXAMINER

BUUKER, K

ART UNIT

PAPER NUMBER

09/12/00 **DATE MAILED:**

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Application No. 08/942,782

Kelvin E. Booker

Applicant(s)

Sollich, P.

Office Action Summary

Examiner

Group Art Unit

2762



X Responsive to communication(s) filed on <u>Jul 3, 2000</u>	
(] This action is FINAL.	
☐ Since this application is in condition for allowance except for formal matters, in accordance with the practice under Ex parte Quay/835 C.D. 11; 453 O.G. 213.	ution as to the merits is closed
A shortened statutory period for response to this action is set to expire3 month longer, from the mailing date of this communication. Failure to respond within the period for application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained 37 CFR 1.136(a).	or response will cause the
Disposition of Claim	
	is/are pending in the applicat
Of the above, claim(s)	_ is/are withdrawn from consideration
	is/are allowed.
Claim(s) 1-6, 8, 9, 11, and 15-20	is/are rejected.
	is/are objected to.
☐ Claims are subject	t to restriction or election requirement.
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on	□disapproved. di). e been Rule 17.2(a)).
Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152	

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DETAILED ACTION

Response to Amendment

- 1. In the amendment filed July 3, 2000 (see paper no. 7 and 8), the following has occurred:
 - a. Applicant has amended figures 1(a), 1(b), and 2;
 - b. Applicant has amended claims 4, 12 and 19 with respect to initial office action; and
 - c. claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 3. Claims 1-6, 8-9, 11 and 15-20 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by McFedries, P., Visual Basic for Applications Unleashed.

As per claim 1, McFedries teaches of a method for assisting a user with inputting source code for a computer program, the method comprising:

a. detecting a need for assisting the user with input for a source code module under development (see figure 1.8; and pages 21-22, IntelliSense pop-up menu);

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b. determining a current cursor position representing a location in the source code module where the user is currently providing input (see figure 1.8; and pages 22-23, listing and properties of available);

- c. determining input items which are suitable for input in the source code module at the current cursor position (see figure 1.8; and pages 22-23, IntelliSense pop-up menu following period (".");
- d. displaying to the user a list of the suitable input items (see figure 1.8; and pages 22-24, list of input items); and
- e. in response to selection by the user of a particular item from a list, automatically completing input at the current cursor position (see figure 1.8; and pages 22-23, IntelliSense list and properties).

As per claim 2, McFedries does not explicitly teach of a method wherein the source code is compiled by a compiler into a program which executes on a target microprocessor.

However, this is deemed to be inherent to McFedries system as he addresses the usage of IntelliSense as a tool of Visual Basic within a development system. The McFedries system would not be effective if there did not exist a means for processing and compiling code.

As per claim 3, McFedries teaches of a method wherein the detecting step includes receiving a request from the user (see figure 1.8; and pages 21-23, IntelliSense options).

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As per claim 4, McFedries teaches of a method wherein the detecting step includes determining instances in the source code module where the system can automatically provide input (see figure 1.8; and pages 21-23, IntelliSense options).

As per claim 5, McFedries teaches of a method wherein the detecting step includes determining in the source code module, the use of a dot operator (see figure 1.8 and page 22).

As per claim 6, McFedries teaches of a method wherein the detecting step includes determining in the source code module use of a class variable which references a class member or method (see figures 1.8-1.10; and pages 21-24, module parameters).

As per claim 8, McFedries teaches of a method wherein the current cursor position in the source code module appears within an assignment statement, and wherein the list of suitable input items comprise a list of items which are assignment compatible (see pages 21-24).

As per claim 9, McFedries teaches of a method wherein the list of suitable input items comprises a list of variables defined within the source code module which can appropriately be inputted at the current cursor position (see pages 22-24, list of available methods).

As per claim 11, McFedries teaches of a method wherein the step of determining input items which are suitable for input in the source code module includes:

- a. determining which variables are within scope for the current cursor position (see pages 22-24, list of available properties and methods); and
- b. eliminating as a suitable input item any item that is not within scope for the current cursor position (see claim 11(a) above).

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As per claim 15, McFedries teaches of a method wherein the step of determining input items which are suitable for input in the source code module includes:

- a. determining a type of input expected at the current cursor position (see pages 22-24, list of available properties and methods); and
- b. determining variables within scope at the current cursor position which have a type compatible with the type of input expected at the current cursor position (see claim 15(a) above).

As per claim 16, McFedries teaches of a development system comprising:

- a. an integrated development interface including a code editor for inputting source code into a source code module being created (see figure 1.8); and
- b. means, responsive to the integrated development interface and the compiler, for assisting a user with input for a source code module under development, the means comprising:
- I) means for determining a current context for source code being inputted (see pages 22-24, pop-up menu with list of available input);
- ii) means for determining appropriate input for the determined current context (see claim 16(d)(I) above); and
- iii) means for displaying to the user the determined appropriate input (see figures 1-8-1.11).

However, McFedries fails to explicitly teach of a system having a processor and a memory, and a compiler for compiling one or more source code modules into a computer program.

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However, this is deemed to be inherent to McFedries system as he addresses the usage of IntelliSense as a tool of Visual Basic within a development system. The McFedries system would not be effective if there did not exist a means for storage and compiling code.

As per claim 17, have the same limitations as claim 3, therefore the same rejections apply (see claim 3).

As per claim 18, McFedries teaches of a system wherein the means for assisting includes means for detecting a position in the source code module where the system can provide assistance (see claim 1(a)).

As per claim 19, McFedries teaches of a system wherein the current context comprises an assignment expression and wherein appropriate input comprises an item which is assignment compatible for the expression (see pages 22-24, list of properties and methods available for input).

As per claim 20, McFedries teaches of a system wherein the appropriate input comprises a variable having a data type which is assignment compatible for the expression (see pages 22-24, list of properties and methods available for input).

Allowable Subject Matter

4. Claims 7, 10, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The following is a statement of reasons for the indication of allowable subject matter: in the cited prior art, McFedries teaches of a method for using IntelliSense as user assisted tool in the code development process, but fails to explicitly address the issues of "skipping" compilation and referencing "nested data" with respect to cursor positioning and user input.

6. Claim 12 is allowed.

Conclusion

- 7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.
- 8. An inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Booker whose telephone number is (703) 308-4088. The examiner can normally be reached on Monday-Friday from 7:00 AM-5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-1396.

An inquiry of a general nature or relating to the status of this application proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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KEB

Patent Examiner

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Tariq R. Noliz
Supervisory Purchase inor

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